Chapter 3

Toward the 1967 War

> . . . [The 1967 war] is indeed lightning war of the kind whose effects we experienced everywhere in 1940, but this time [it was] compressed within a limited time frame never before realized.
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> —André Beaufre[1]

For the Israel Defense Forces, the interwar years proved a revolutionary period that saw significant changes in Israeli doctrine, command and control, force structure, operational thinking, and training. The cumulative effect of this activity was to transform the Israeli Army into a modern fighting machine capable of conducting rapid maneuver warfare into an enemy's rear with large armor formations supported by an air force. This development largely explains the rapid and decisive defeat the Israelis inflicted on three Arab states in 1967 and provides a perspective for analyzing the reasons behind the exemplary Israeli capture of Abu Ageila in a combined arms operation conducted on the night of 5—6 June.

The Israeli Air Force and Armor Corps, 1956—67

Between the 1956 and 1967 wars, the IDF, acutely aware that Israel might have to fight alone on several fronts without any strategic depth, substantially changed its thinking on warfighting. The senior command, although still maintaining an overall strategy calling for rapid penetration of an enemy's territory, came to emphasize the concept of a far shorter war, won with greater firepower and enhanced mobility. But Israel had to determine how to wage such a war.[2]

The 1956 campaign in the Sinai had demonstrated to the senior leadership of the army the critical importance of air power in modern warfare: control of the air had tremendously enhanced Israeli ground operations in the desert. In line with this conclusion, between 1956 and 1967, the IDF developed the Israeli Air Force (IAF) into its premier service so that by 1967 the IAF was receiving half the allocations of the entire defense budget. Such a priority in the budget allowed the Israelis to purchase the most modern French aircraft, including the Mirage IIIC, the Mystère IVA, and the Super Mystère. These planes greatly enhanced the IAF's capability to destroy the Egyptian Air Force on the ground in a surprise attack—just as the French and British had done in 1956. To ensure the execution of such a complicated operation, Brigadier General Ezer Weizman, commander of the IAF from 1958 to 1966, implemented high standards for selecting and training pilots: the best now went to the air force instead of to the paratroopers.

As a result of these far-reaching changes, the IDF ultimately developed the concept of a preemptive air strike as the centerpiece of Israeli military strategy. Once Israel attained air superiority, the General Staff also planned to use the air force to support ground operations. This would require much greater coordination between the two services. Consequently, after the 1956 war, command of the air force moved from Ramla to GHQ in Tel Aviv. The air force commander now worked under one roof with the chief of the General Staff.

The idea of a short war fought with a modern air force required major changes in the ground forces. Instead of an infantry-dominated army, military planners now envisioned a rapidly advancing army led by large tank formations that employed great mobility and firepower. This force's objective would be to strike into the enemy's rear, causing its army to collapse through the disruption of its command and control system and lines of communication. Such thinking spelled the end of the doctrinal dispute generated by the earlier armor-versus-infantry debate. Dayan, now a true believer in armor, wholeheartedly embraced the tank "school" led by Haim Laskov and others. In this new view, armor, rather than providing fire support for infantry, became the decisive arm in a major land campaign, supported in battle by the air force, paratroopers, and infantry.

Brigadier General David Elazar, who had commanded an infantry brigade in the Gaza Strip in the 1956 war, helped develop this tank doctrine as head

Mystère jet fighters

Israel Defense Army 1948—1958

of the Armor Corps between 1961 and 1964. After the Six Day War, Elazar described armor's new role:

> The emphasis put on armor for land warfare is, in my opinion, a characteristic of all modern armies. After the air force, armor is the factor that decides the fate of battles on land. No other factor—except enemy armor—can wrest the decision from it. The development of the Armored Corps is therefore the factor that has turned Zahal [the IDF] into a modern army and has prepared it for this last war. The task of armor, like that of the air force, is to carry the battle into the enemy's territory and thus obtain a quick decision.[3]

In developing their theory and practice of tank warfare, the Israelis were in some measure influenced by the writings of British theorists B. H. Liddell Hart and J. F. C. Fuller and the practices of the German Army in World War II.[4] Yet the Israeli General Staff avoided merely imitating the practices of others and instead adopted its own doctrine for the tank, one that the Israelis believed was better adapted to Israel's environment and its army's requirements.

Brigadier General Israel Tal, as head of the Armor Corps from 1964 to 1967, was the main architect of Israel's new armor doctrine. (In 1956, he had taken command of Goder's brigade at Abu Ageila.) According to Tal's thinking, Israel did not need fast, light tanks but vehicles emphasizing firepower and survivability. Israel's small population relative to its Arab neighbors dictated that it place a high premium on saving its soldiers' lives. Armor-heavy British Centurion and American Patton tanks—although slower than the German Leopard, the Russian T-54/55, or the French AMX-30—had better protection and thus met this requirement.

Tal believed the rugged American and British tanks would allow Israeli armor units, supported by infantry and artillery, to punch through tough defensive positions. Then, the tanks could move rapidly across open desert terrain, sometimes without the mechanized infantry, whose main task would be to mop up. Eventually, the tanks would fight a deep battle against other tanks in maneuver warfare. To ensure rapid movement of the tanks without the support of mechanized infantry required excellent gunnery by tankers, which Tal achieved for the Armor Corps through his institution of high standards and rigorous training.[5] (Weizman effected equal reforms in the IAF.)

Tal's approach to warfare, however, neglected combined arms, which includes infantry and artillery in the attack. But this deficiency failed to hamper the Israelis in 1967. Once the Egyptian Air Force was destroyed on the tarmac, Israeli pilots assumed the role of flying artillery for ground forces, and the results were devastating for the Egyptians.

Command, Tactics, and Training

One important lesson drawn from the 1956 war concerned the need for better control of larger formations. In the Sinai campaign, the *ugdah*, still in the experimental stage, functioned as a command framework for task forces of two or more brigades. It possessed a small staff but no organic combat units. Dayan regarded brigades as more or less self-contained units that fought independently, and consequently *ugdah* headquarters had exercised loose control over combat forces. In a future war, however, the IDF would need better

coordination among brigades if the Israeli Army was to defeat the Egyptian Army decisively before moving to another front.

The increased size of Israeli forces and the need for a shorter war also influenced the IDF to refine its command and control system. In 1967, as in 1956, the IDF would fight with the brigade as its primary formation. But the size of the Israeli Army fighting in the Sinai would rise from 45,000 in 1956 to over 70,000 men in 1967. Moreover, the total mobilized strength potential for IDF ground forces during this period grew from 190,000 to 250,000. Such a growth in manpower required a better functioning headquarters between the theater or front command and the brigades, and the key link in this command chain would have to be the *ugdah* (a division-size task force of two or more brigades).

Time remained a critical factor in Israeli operations. The Israeli economy could ill afford a long war; nor could the IDF sustain the offensive on two fronts for an extended time without having to go on the defensive on one. Israel's lack of strategic depth made the defense anathema to the IDF. Thus, Israeli military planners were driven by a military strategy calling for a rapid thrust into the enemy's territory and its army's depth. Such lightning war required intricate planning for the breakthroughs, followed by closely coordinated movements among larger units during the exploitation. These exigencies dictated that the Israelis develop a delicate balance between centralized operational direction and decentralized tactical execution.

A group of Israeli senior officers directing a maneuver (in training)

Israel Defense Army 1948—1958

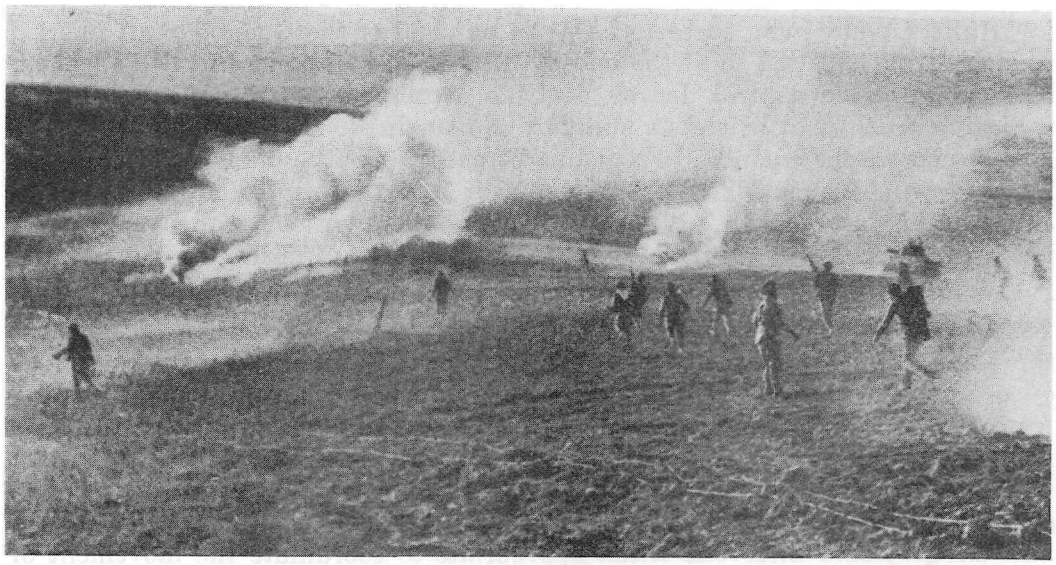
Haim Laskov, who succeeded Dayan as chief of the General Staff in 1958 and held that position until the end of 1960, helped improve the IDF's system of command and control. Israeli doctrine continued to stress flexibility and initiative on the battlefield. A standard slogan in the IDF is that "a plan is merely a basis for changes." From this perspective, battle plans will invariably break down because of the friction of war and the unpredictable nature of enemy behavior. Nonetheless, Laskov realized that various maneuvers had to be coordinated if the Israeli Army was to achieve sufficient force at critical points in a campaign.

To take advantage of the uncertainty and flux of the battlefield, while at the same time adhering to strategic and operational objectives, Laskov developed a concept that became known as "optional headquarters control." Acting from this conceptual framework, *ugdah*, brigade, and battalion commanders in direct contact with the enemy had to possess command flexibility if they were to deal effectively with enemy forces. To ensure the rapid defeat of the enemy in a theater of operations, higher echelons—i.e., the area command and GHQ—would intervene when appropriate to coordinate the movement of large formations for the attainment of strategic goals.[6]

To put this theory of command and control into practice in the early 1960s, the IDF began to execute *ugdah*-level exercises to institutionalize the proper relationships between the various headquarters. The *ugdah* thus developed into the largest tactical headquarters—an overriding unit of organization designed to achieve strategic aims while maintaining flexibility in tactical operations. By functioning through the *ugdah* headquarters, the theater commander could concentrate his forces at critical moments in a campaign. Although still basically a large task force organization in 1967, the *ugdah* would fight all the main and decisive engagements of the war. Two of the three *ugdahs* employed in the Sinai contained two full-size armor brigades that fought as brigades in spearhead operations. By 1973, the *ugdah* would become the Israelis' standard fighting unit, in the process taking away most of the logistical assets of brigades.[7]

Though concerned with command and control for larger formations, the Israeli military leadership still had to come to grips with battle in the forward area, specifically the tactical problem posed by Egyptian fortifications close to the Israeli border. In this regard, the IDF drew from its 1956 experience a healthier respect for the fighting capabilities of the Egyptian Army on the defense. As a result, Laskov and other military critics attacked Dayan's Collapse Theory, arguing that the 1956 war had demonstrated Egyptian defenses had not fallen simply because they had been isolated. No better case for this point could be made than that of Abu Ageila. Capturing Egyptian fortified positions required the organized application of sufficient combat power—including tanks—since the Egyptians proved very capable of putting up a stalwart defense against uncoordinated attacks.

Such reasoning led the IDF to devote more attention and effort to developing techniques for assaulting fortified positions. Israeli planners expected the Egyptians to follow the advice of their Soviet advisers or the instruction they received in the Soviet Union. Consequently, the Israeli General Staff studied Soviet defensive doctrine and devised solutions for fighting in the daytime or at night.[8] Combat units—especially from the reserves—underwent



Israel Defense Army 1948—1958

Israelis advancing on an objective under cover of a smoke screen (in training)

rigorous training. And to further strengthen reserve units, the IDF reassigned older individuals to supporting roles so that more physically fit soldiers—those younger than forty—remained in combat formations. The IDF sought to avoid a repetition of the poor performance of the 10th Infantry Brigade in the last war, which was a unit that contained an inordinate number of soldiers over the age of forty.[9] In 1967, as a result of the above changes, the IDF was better prepared to wage war with large formations that employed both regular army and reserve units.

The IDF and the 1956 Battle of Abu Ageila

The Israelis expected the Egyptian Army to rely on the defenses of Abu Ageila as an obstacle to unhinge any deep Israeli penetrations into the Sinai. Consequently, the IDF watched closely any changes in the defenses there and updated its plans accordingly. The exact relationship between the 1956 battle and the Israeli war plan in 1967, however, is still puzzling.

According to the popular American historian Trevor Dupuy, each year the Israeli Command and Staff College conducted a major map exercise involving an attack against Abu Ageila. In the process, students used the experience of the 1956 battle to explore ways to avoid similar mistakes in the future. Dupuy says:

> Following the failure to take Abu Ageila in 1956, the Israeli General Staff had made intensive studies of the battle. . . . In addition to detailed staff analyses, a major map problem in the Israeli Command and Staff College each year was an attack on the Abu Ageila position. This problem was updated each year to reflect everything that was known about any Egyptian improvements. Thus by 1967, most of the commanders and staff officers in the Israeli army were extremely familiar with the stronghold, with the causes of the 1956 setback, and with current official General Staff concepts of how to avoid a similar setback in a future struggle . . .[10]

Israel Defense Army 1948—1958

An Israeli forced march (in training)

This analysis suggests a possible direct link between the two battles, since many junior and senior officers became intimately knowledgeable concerning the 1956 battle by virtue of their attendance at the staff college. But the actual relationship was probably not as direct as that suggested by Dupuy.

Indeed, a number of Israeli military sources deny that the IDF employed any sort of historical method at the staff college to help its officers solve the tactical problems posed by a capture of Abu Ageila. The curriculum did not even provide officers with the details of the 1956 battle but presented Abu Ageila as a contemporary tactical exercise—not as a systematic historical case study. Students received only the latest data on Egyptian defenses and vital terrain information. Then, they were required to apply hallowed principles of warfare, common sense, and imagination to develop their own solutions.

Natke Nir, for example, graduated from the Israeli staff college in 1964. A platoon commander in Gaza in 1956, he unequivocally denies the instructional dynamic described by Dupuy. In 1967, Nir, whose mission drove him into the rear of Abu Ageila, possessed only vague notions of the 1956 battle. And only after the 1967 war did he learn how Adan had conducted an operation similar to his own![11] Detailed institutional knowledge in 1956—which may have existed for planning purposes—most likely remained in key departments such as the G3 or the Operations Branch. How this knowledge was actually used, if at all, is a subject for further research.

The influence of the staff college on the outcome at Abu Ageila in 1967 appears to have been inconsequential. More far-reaching effects on the future battle came as the result of a revolutionary period characterized by significant changes in Israeli doctrine, command and control, force structure, and training of reserves. These changes ensured that the Israelis would have the capability to defeat the Egyptian Army in the forward and deep battle areas. As a result of these new developments, the Israeli *ugdah* commander assigned to take Abu Ageila in 1967 would lead forces exhibiting a higher degree of professionalism than his predecessor in 1956. Also favoring the Israeli commander in 1967 would be an assault order that allowed him to concentrate all available forces for his mission, which would avoid the tentative, piecemeal approach characteristic of the 1956 campaign.

Two Armies Face-to-Face

Unlike the calm before the 1956 war, a train of events in May and June of 1967 escalated tensions between Israel and her Arab neighbors to such a degree that the outbreak of war on 5 June came as no surprise. On the Sinai border, two large armies, fully mobilized and in a high state of alert, faced each other. The immediate events leading to war, however, had in fact begun on the Golan front.[12]

On 7 April 1967, Israeli and Syrian Air Force fighters clashed in a major dogfight that resulted in the downing of six Syrian planes; Israel followed up on its success with a defiant buzzing of Damascus, the Syrian capital. This incident embarrassed the Syrian regime. President Gamal Abd al-Nasser, for his part, drew acerbic criticism from Arab capitals for not living up to his defense pact with Syria. Critics also charged the Egyptian leader with hiding behind the United Nations peacekeeping force that had been placed in the Sinai shortly after the 1956 war. In the midst of growing tension came reports, apparently originating from Soviet sources, that Israel was massing troops on the Golan front for a punitive strike into Syria. This information naturally sparked alarms throughout the Arab world.

Since Nasser had recently seen his prestige in the Arab world decline as a result of Egypt's military involvement in Yemen (where over 50,000 Egyptian soldiers had been engaged in a costly war since 1962), he felt the need to act decisively. On 14 May, he ordered a general mobilization and the immediate dispatch of Egyptian troops to the Sinai as a clear demonstration of his support for Syria. Furthermore, General Muhammad Fawzi, the chief of the General Staff of the Egyptian Armed Forces, departed for Damascus to evaluate the situation there for possible coordination of military action. Fawzi, as he later admitted in his memoirs, saw no evidence of an Israeli buildup along the Syrian border. In fact, much to his surprise, he found the Syrian regime so unconcerned about recent reports of an impending Israeli invasion that it had not even bothered to call out its reserves. Fawzi, therefore, returned to Cairo the following day with the assessment that there existed little likelihood of war.[13]

By this time, however, Nasser had gone too far to exit gracefully. Egyptian troops, already en route to the Sinai, had paraded through the streets of Cairo before large crowds. Recalling these forces would have proved an embarrassing matter indeed. Nasser's Arab critics would have exploited such an action to the fullest, and the immediate political and military consequences would have been serious. As Egypt took concrete steps in support of Syria, other Arab states now found themselves on the defensive and compelled to demonstrate their own solidarity with the Arab cause. Syria, for example, followed Cairo's lead and placed its own armed forces on a high state of alert for possible war with Israel.

Within two weeks, the Egyptian militarization of the Sinai had exceeded a mere demonstration of military support for an ally. At the beginning of May, before the commencement of mobilization, Egypt had stationed the 20th Infantry Division in the Gaza and the 2d Infantry Division in eastern Sinai.[14] By June, however, Egypt had six divisions in the Sinai, including the 4th Armored Division and another armored force of somewhat less than division strength. This army, which comprised approximately 100,000 men and 900 tanks, was poised within easy striking distance of Israel. To assemble this force, Nasser had mobilized the reserves and transferred some units from Yemen back to Egypt.

Developments in other Arab countries further raised the risk of war. On 30 May, King Hussein, whose relations with Nasser had been poor before the crisis, surprised many observers by journeying to Cairo to initial a mutual defense pact with Egypt. By this agreement, the Jordanian monarch agreed to place his army under Egyptian command. On 2 June, Egyptian Lieutenant General Abd al-Munim Riyad arrived in Amman to assume command of all Jordanian forces, and the next day, three Egyptian commando battalions followed him to Jordan. But matters did not end here. Iraqi troops also began leaving their bases in Iraq to take up positions in Jordan, while other Arab countries prepared to send their own token forces to the three confrontational states as symbols of Arab unity.

In addition to militarizing the Sinai, Nasser made two other important decisions that contributed to war. On 16 May, he had General Fawzi, the chief of the General Staff, send a letter to the UN commander requesting the withdrawal of UN troops from the Egyptian-Israeli border. Egypt followed up

this action on 18 May with a formal request for a withdrawal, this time to U Thant, the secretary-general of the United Nations. In the interim, on the 17th and 18th, Egyptian troops began occupying positions near the Israeli border that had been held by UN observation teams.[15]

Whatever Nasser's actual intention, U Thant promptly complied by ordering the withdrawal of all UN troops beginning on 19 May. Now, no international forces stood between Israel and Egypt. The atmosphere at GHQ in Israel had been relaxed until this time, although the Israeli senior command closely watched developments. When U Thant agreed to the Egyptian demand for a withdrawal, Israel had little choice but to order the mobilization of some 60,000 to 70,000 reserves, most of these earmarked for the Sinai.[16] Then, on 22 May, Nasser made another serious mistake when he ordered the closure of the Tiran Strait—a move that established a blockade of Eilat, Israel's only outlet to the Indian Ocean. Israeli leaders thought this action highly provocative, giving Israel just cause for a military response. All international efforts in the next two weeks aimed at creating a peaceful resolution to the confrontation were unproductive. When on 4 June the Israeli political leadership gave the green light for war with Egypt, the IDF was poised and ready to launch what it hoped would be a fast and decisive strike into the Sinai.

The Creation of Egyptian Operational Vulnerability

When Israel launched her air attacks against Egypt's airfields on the morning of 5 June, the Egyptian Armed Forces had orders to hold in a defensive posture, ready to absorb an Israeli first strike. Although conditions seemed to favor a long, drawn-out war in the Sinai, the Egyptian Armed Forces had in fact suffered a great deal of self-inflicted disorientation in the critical three weeks prior to the outbreak of war—a confusion that largely nullified the progress achieved by the Egyptian military in the interwar period. Changes in commanders, the unexpected creation of a major command, the discarding of the defensive plan for the Sinai and concomitant troop redeployments: all created havoc in the Egyptian military, weakening an army that otherwise possessed numerical superiority over its foe. This state of affairs made Egypt's military position vis-à-vis Israel much worse than it had been in 1956. Furthermore, it served to undermine what appeared to be formidable defenses at Abu Ageila.

During the 1967 war, the Egyptian Army's command and control system down to division and brigade level broke down. The seeds of this problem were planted in the three weeks before the outbreak of hostilities. Earlier, in 1966, the Egyptians developed a new plan for the defense of the Sinai called *Qahir* (the victor). Plan *Qahir* placed control of combat forces in the Sinai under a field army commander directly responsible to GHQ in Cairo. But on 15 May, for reasons that still remain unclear, the Egyptian high command surprised its senior officers with the sudden creation of a front command and the appointment of General Abd al-Mohsen Kamal Murtagui to head it. Now, the chain of command went from President Nasser, the supreme commander, to (1) a general headquarters in Cairo under Field Marshal Muhammad Abd al-Hakim Amer and the Chief of the General Staff, General Muhammad Fawzi; (2) the front command under Murtagui; (3) the field army command under

Lieutenant General Salah al-Din Mohsen; and, finally, (4) the division commanders in the Sinai.

Murtagui, as the new front commander, would be plagued by a number of problems. Although a competent soldier, he had been commanding the Egyptian expeditionary force in Yemen and lacked intimate knowledge of the operational plan for the Sinai. Furthermore, as a front commander in the Sinai, he would receive a high degree of responsibility without the commensurate authority to carry out his mission. Murtagui was to direct operations against Israel until Field Marshal Amer arrived in the Sinai to assume command, but in the interim, he could only make decisions that conformed closely to the directives of GHQ. This arrangement left Murtagui with little authority for taking any initiative—although in appearance he possessed a major command with such a mandate. Finally, Murtagui arrived at his command post in the Sinai (near Bir al-Thamada) on 29 May—only a week before the war and with a small staff of twenty officers.[17] The Egyptian command and control system was further undermined when the high command replaced all twelve division commanders and chiefs of staff in the week or two after the creation of the front command.[18] Then, the confusion seeped down to brigades and lower.

Further aggravating the situation in late May, the Egyptian high command made four major changes in its war plans for the Sinai, which compounded the confusion already caused by the structural and personnel changes made on the eve of war. Plan *Qahir* called for the regular army to deploy across the depth of the Sinai along the major routes of advance. According to *Qahir*, a security zone close to the border—manned by reconnaissance, paratroop, or border patrol battalions—would provide early warning of an Israeli attack. Behind this zone stood tactical and operational defense regions, each divided into two areas.

The first tactical region centered on the fortified points of al-Thamad, Qusaymah, Umm Qatef, and al-Arish and was manned by an infantry division supported by two mechanized infantry brigades and an armored regiment. Behind these forward forces stood a second echelon, consisting of an infantry division located in the region of Gebel Halal and Gebel Libni. The operational reserve occupied three positions: one north of Nakhl (an armor regiment); a second at Bir al-Hasana (two infantry brigades and a divisional command); and a third on the central route (an armored brigade). All these forces were under a field army commander whose headquarters was in the center of the Sinai at Bir al-Thamada. To the rear of these forces stood a reserve under general headquarters—comprised of an armored division and a brigade of paratroopers—located in two operational areas, one before and one behind the passes. Forces in the two forward lines were to hold their positions and receive reinforcements, if necessary, while the armored division eventually counterattacked to destroy any major breakthrough.[19]

During the month of May 1967, however, general headquarters made four major changes in Plan *Qahir* so that the final defensive concept bore little resemblance to the original plan. In fact, during the last two weeks of May, the Egyptian Army even prepared to launch an offensive into Israel to seize the port of Eilat on the Gulf of Aqaba. But in the end, Nasser ruled that Egypt should accept the first strike. By this time, the Egyptian Army in the

Sinai had deployed with a different set of priorities than those envisioned in its original plan. *Qahir* had emphasized the central route as the most likely place for the Israeli main effort, with the main defensive positions at Abu Ageila, Qusaymah, al-Arish, and al-Thamad. The new forward defensive area now centered on Rafah, Qusaymah, and Kuntilla, which required a major deployment of Egyptian forces forward from al-Arish to Rafah and from al-Thamad to Kuntilla, which turned al-Arish, Gebel Libni, Bir al-Hasana, and al-Thamad into the second line of defense.[20]

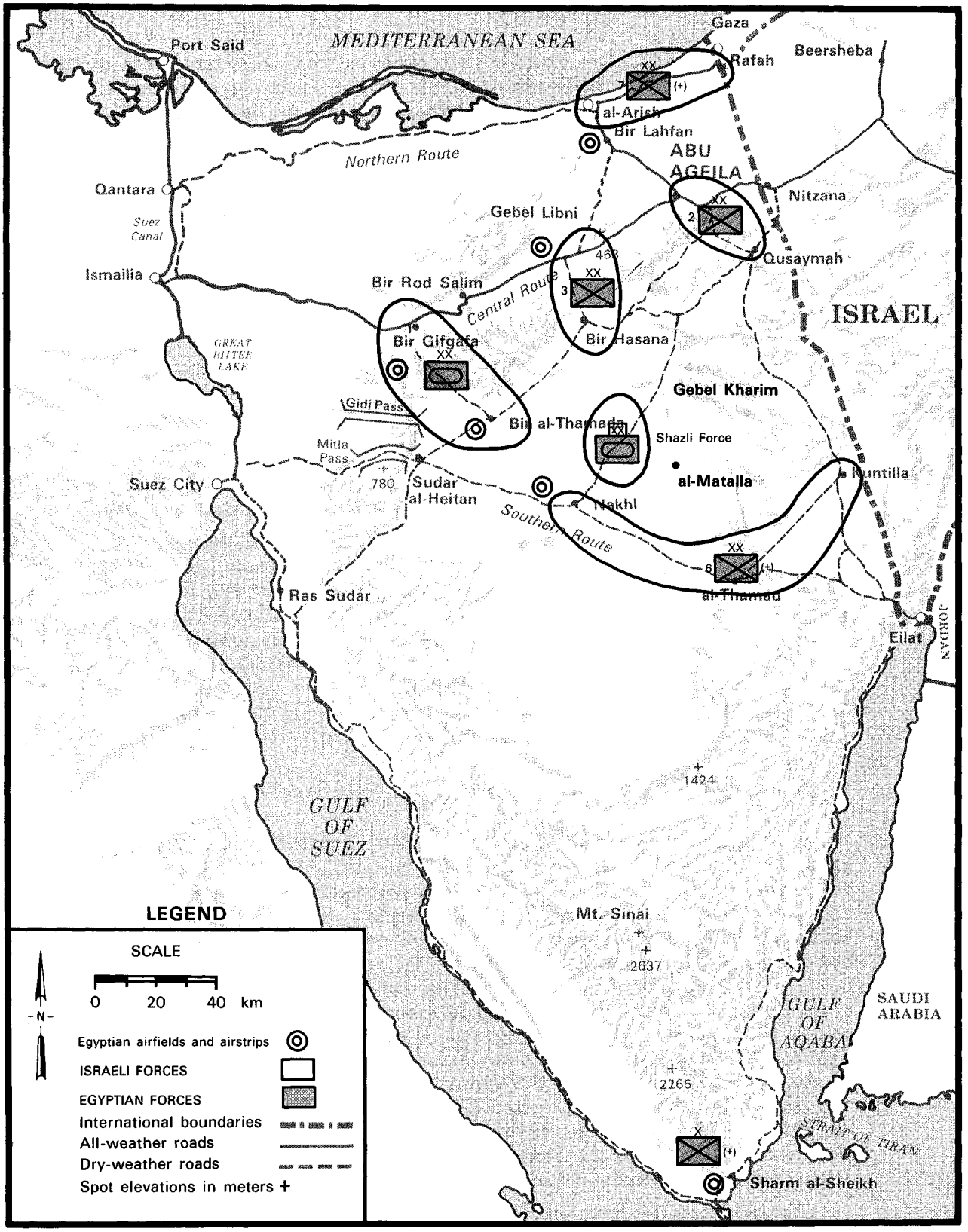
These changes in *Qahir* left little of the original plan. Now a much larger percentage of the Egyptian Army was positioned close to the Israeli border and along its length as well. This deployment left the Egyptians strategically vulnerable should the Israelis achieve a major breakthrough and advance rapidly into the Egyptian rear, and the Israeli Army set the stage for exactly this development by devising a deception plan that would further unbalance Egypt's armed forces.

To effect their plan, the Israelis placed an armored brigade with many wooden tanks and other fake vehicles in the southern sector, opposite Kuntilla, hoping to create the illusion that the Israeli main effort would occur there.[21] Egyptian military intelligence completely fell for this ruse and began reporting that Israel was massing troops in the south. Field Marshal Amer, against the advice of several senior officers at general headquarters, concluded that the Egyptian Armed Forces needed to deploy more troops to the area of Kuntilla, al-Thamad, and Nakhl. At the end of May, the Shazli Armored Task Force, created a week earlier, moved from Rafah in the north to the south in accordance with this new assessment. Then, Amer designated the area of Gebel Kharim and al-Matalla as a killing zone for the destruction of Israeli armor (see map 14). Amer's staff labored vigorously to make appropriate changes in their ever-altering war plans.[22]

Through their deception plan, the Israelis succeeded in substantially depleting forces from the Egyptian defensive positions in the northern region, where the IDF planned their main attack. The fact that Egypt had positioned one armored and four infantry divisions in the Sinai, reinforced with a division-size armored force, meant little in this instance. With many more Egyptian troops forward than envisioned in Plan *Qahir*—and these concentrated in the south—the IDF now could exploit its strategic advantage with an operational maneuver that left a good part of the Egyptian Army excluded from the main combat. This would directly affect the battle for Abu Ageila.

In addition to its changes in command and control, senior tactical commanders, war plans, and troop deployments, the Egyptian Armed Forces had to place a greater reliance on reservists than envisioned in Plan *Qahir*. To increase its army's size—especially since three of its divisions continued to fight in Yemen—the Egyptian high command mobilized its reserves and used them to form new frontline units. By the eve of the war, the Egyptian Army had grown to over 130,000 men (excluding forces in Yemen), of which some 80,000 were reservists, including over 1,000 officers.[23]

The mobilization of the reserves presented the Egyptian military with a number of problems. Many reservists were poorly trained because of Egyptian budget cuts to meet the immediate and pressing requirements of fighting in



Map 14. Egyptian deployments in the Sinai

Yemen. Furthermore, the manner that reserves were integrated into units weakened the combat readiness of many regular units. In some cases, for example, a battalion grew—with the integration of reservists—into a brigade so that the new unit consisted of one-third regular army troops and two-thirds reservists.[24]

This influx of poorly trained soldiers into regular units undermined the integrity of units and threatened group cohesion on the battlefield. Unlike its counterpart in the 1956 war, the Egyptian division responsible for Abu Ageila in 1967 experienced some of this last-minute disorientation. One important lesson learned by the Egyptians after the 1967 battle for Abu Ageila concerned the need to maintain the integrity of units through continuous training over an extended period of time.[25]

Thus, on the eve of war, the Egyptian senior command, in part responding to directives from the political leadership, had undermined its own command and control system. The result was the weakening of Egyptian forces in the vital areas of (1) leadership, by replacing all the division commanders; (2) the chain of command, by creating a weak front command; (3) unity of purpose, by frequently changing plans and strategy; and (4) integrity of force, by relying on a disproportionate number of ill-trained and recently called-up reservists.

All this self-destructive activity created an operational vulnerability in the Egyptian command and control system from general headquarters through brigades. Egyptian senior commanders were uncertain of the intent of the next higher command. Any major surprise or setback inflicted by the Israelis could rattle the Egyptian command and control to the point that general headquarters might lose control of the battlefield. Furthermore, the Egyptians would have no time to make changes in the midst of battle to rectify their errors. Unfortunately for the Egyptians, the IDF was prepared to execute its plan with an army unhampered by such serious drawbacks.

Abu Ageila and the Egyptian Defense of the Sinai

After the 1956 war, the Egyptian military leadership characterized the battle for Abu Ageila as a showpiece of Egyptian heroism for the purpose of developing national pride in the army and self-confidence among its military personnel. Not only had the Egyptian defenders, both officers and soldiers, held out for four days against several Israeli attacks, but they did so in fierce hand-to-hand night combat. Because of the resolute Egyptian defense, the Israeli force attacking Umm Qatef lost its confidence, and even the personal intervention of Dayan himself failed to instill the required combat spirit. To bolster their highly favorable portrayal of their combat performance at Abu Ageila, Egyptians cited statements of Israeli military officials praising the bravery of Egyptian soldiers. For many Egyptians, only the entry of France and Britain into the war had forced Egypt to retreat from Abu Ageila.[26] Even art played an important role in building national pride in the armed forces. Sketches and paintings transformed the battle for Abu Ageila into an heroic defense of the magnitude of Russian World War II struggles.[27]

The Egyptian military, on its part, conducted some serious studies of the Sinai campaign, with special attention given to Abu Ageila. In a book on the

1956 war published in Cairo in 1960, Muhammad Kamal Abd al-Hamid, an Egyptian brigadier general, identifies a number of specific lessons drawn from the battle of Abu Ageila. According to the author, the Egyptians were highly successful in coordinating their artillery and infantry to repulse attacks and forestall an Israeli victory. The Egyptians were also superior in countering surprise assaults and defeating superior forces with accurate fire; in employing barbed-wire obstacles, tank obstacles, and observation posts for artillery; and in their evident spirit of sacrifice among all ranks. The Egyptian author also implies that a good Egyptian defense based on sound leadership, high morale, good employment of terrain, and the proper coordination of arms could conceivably unravel an Israeli command and allow the Egyptians to seize the initiative.[28] Other lessons drawn by the Egyptians from the battle, but not discussed by Abd al-Hamid, concern the vital importance of air superiority and close air support for both defensive and offensive operations and the necessity of having tanks within the main defensive perimeter for effective local counterattacks.[29]

Knowing that any future campaign in the peninsula would involve a major struggle for Abu Ageila's key terrain, the Egyptian military, after 1956, maintained the position as a showpiece fortification in the Sinai. According to one Israeli source, every year the Egyptian Command and Staff College conducted a staff ride to Abu Ageila for the purpose of familiarizing its officers with its defenses.[30] Since the Egyptians placed such importance in Abu Ageila, should the Israelis invade again, another stalwart defense could be expected—especially since most of the Egyptian Army was deployed close to the Israeli border. During the years 1964—67, the Egyptian Army, aided by Soviet advisers, strengthened defensive positions in the eastern Sinai, laying new mines and barbed wire; digging trenches and bunkers for infantry; constructing stongpoints and observation posts; and building water storage tanks and ammunition depots.[31] From the Egyptian perspective, Abu Ageila had been transformed from an area of defense in 1956 to a well-fortified strongpoint by 1967.[32]

The Egyptian military also significantly changed its defensive system at Abu Ageila, integrating Soviet defensive practices consistent with Egyptian capabilities, objectives, and lessons learned in the 1956 war. In particular, the Egyptians blended the hedge-hog of 1956 and the Soviet system of linear defense, for the Egyptians had concluded that their defenses had worked well earlier and did not want to overhaul them completely.[33]

The Israelis expected the Egyptians at Abu Ageila to rigidly adopt the Soviet system of defense (as the Israelis understood it). Yael Dayan, Moshe Dayan's daughter, who served as a military correspondent with the Israeli *ugdah* assigned to capture Abu Ageila in 1967, recorded this expectation, as described to her by Colonel Dov Sion just before he participated in the Israeli attack on Umm Qatef:

> . . . Dov drew a few lines on the paper. "It is a typical Russian defense system," he said, "composed of three straight lines, the outer one, the main, and a rear". . . . Then Dov drew three long lines on the paper, crossing the road. "This is Um-Katef." The lines are the long ditches, three of them resting confidently on the impassable dunes on the left flank and on the high ground on the right flank.[34]

As we shall see, the Israelis formed their plans and structured their forces based on this premise, but the Egyptians had constructed only two lines of trenches forward at Umm Qatef.[35]

Egyptian Defenses at Abu Ageila

On the surface, the Egyptian defenses in the Abu Ageila area appeared much more formidable in 1967 than those of 1956. Now, instead of an infantry brigade without tanks, an entire infantry division, the 2d, occupied the Abu Ageila-Qusaymah area, with the 10th Infantry Brigade in Qusaymah and the 12th Infantry Brigade in Abu Ageila. By this arrangement, the Egyptian high command had made Qusaymah an integral part of the Abu Ageila defensive complex—much more so than in 1956. Furthermore, the Egyptians reinforced the 12th Infantry Brigade with a tank regiment and additional infantry and artillery. The composition of forces at Abu Ageila was as follows:

37th, 38th, and 39th Infantry Battalions organic to the 12th Brigade
352d Infantry Battalion
51st Artillery Brigade minus one battalion
299th Battalion of Artillery
336th Battalion of Medium Artillery
one company of antitank guided missiles (Shmel)
two companies of antiaircraft guns
6th Tank Regiment (see figure 3)[36]

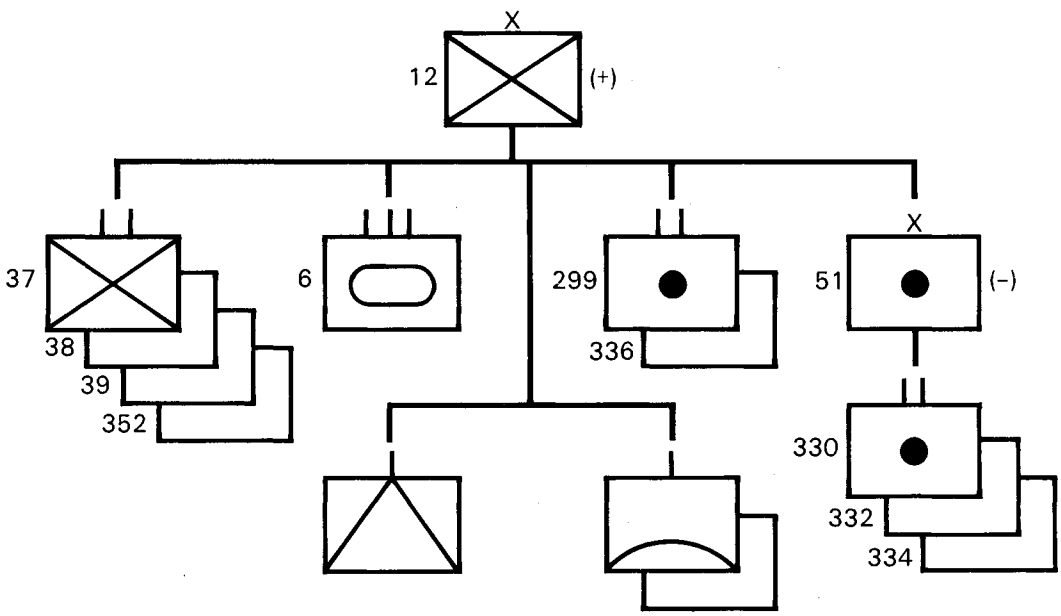


Figure 3. The Egyptian 12th Infantry Brigade (Reinforced)

With the standard size of an infantry division around 11,000 men, the 2d Infantry Division, with its attached units, numbered around 16,000 men.[37] Of these, approximately 8,000 were stationed in the Abu Ageila area. The Israelis

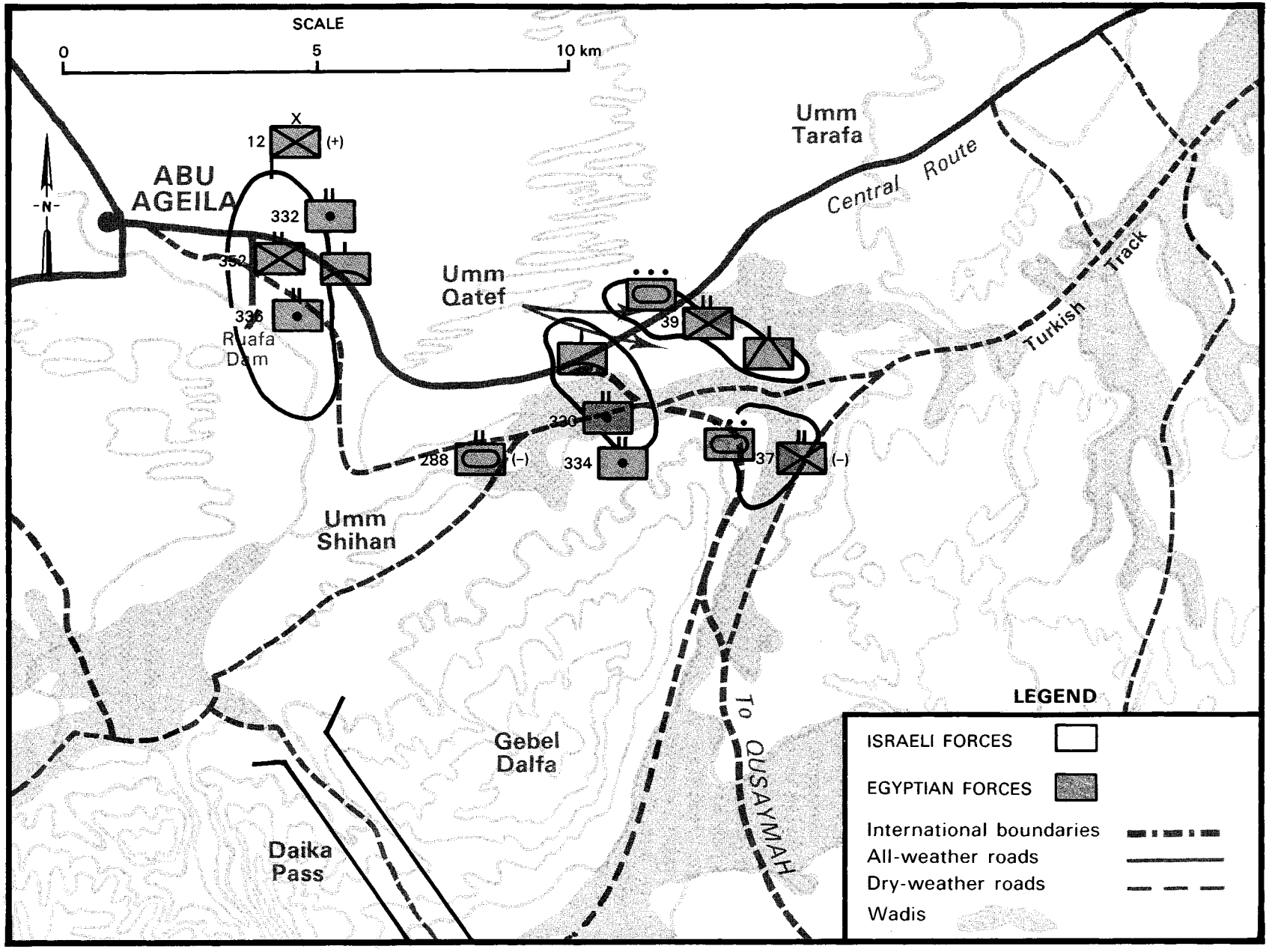
thus faced a much larger force at Abu Ageila than in 1956, one which could be reinforced quickly by elements from the 10th Brigade at Qusaymah, twenty-two kilometers away.

During the interwar period, the Egyptian senior military leadership, well aware of the growing importance of the tank in Israeli warfighting doctrine, adjusted its defenses accordingly. Thus, the 12th Infantry Brigade fielded approximately sixty-six T-34 tanks, with their 85-mm guns, and twenty-two SU-100 self-propelled tank destroyers, with their 100-mm guns.[38] With his 6th Tank Regiment, the brigade commander now was capable of launching an armored counterattack designed to prevent any Israeli breakthroughs. Dayan noted in his diary that the Egyptians had no such capability in 1956, and he considered it a major weakness. But now, the Israelis had to expect a tank battle at Abu Ageila.

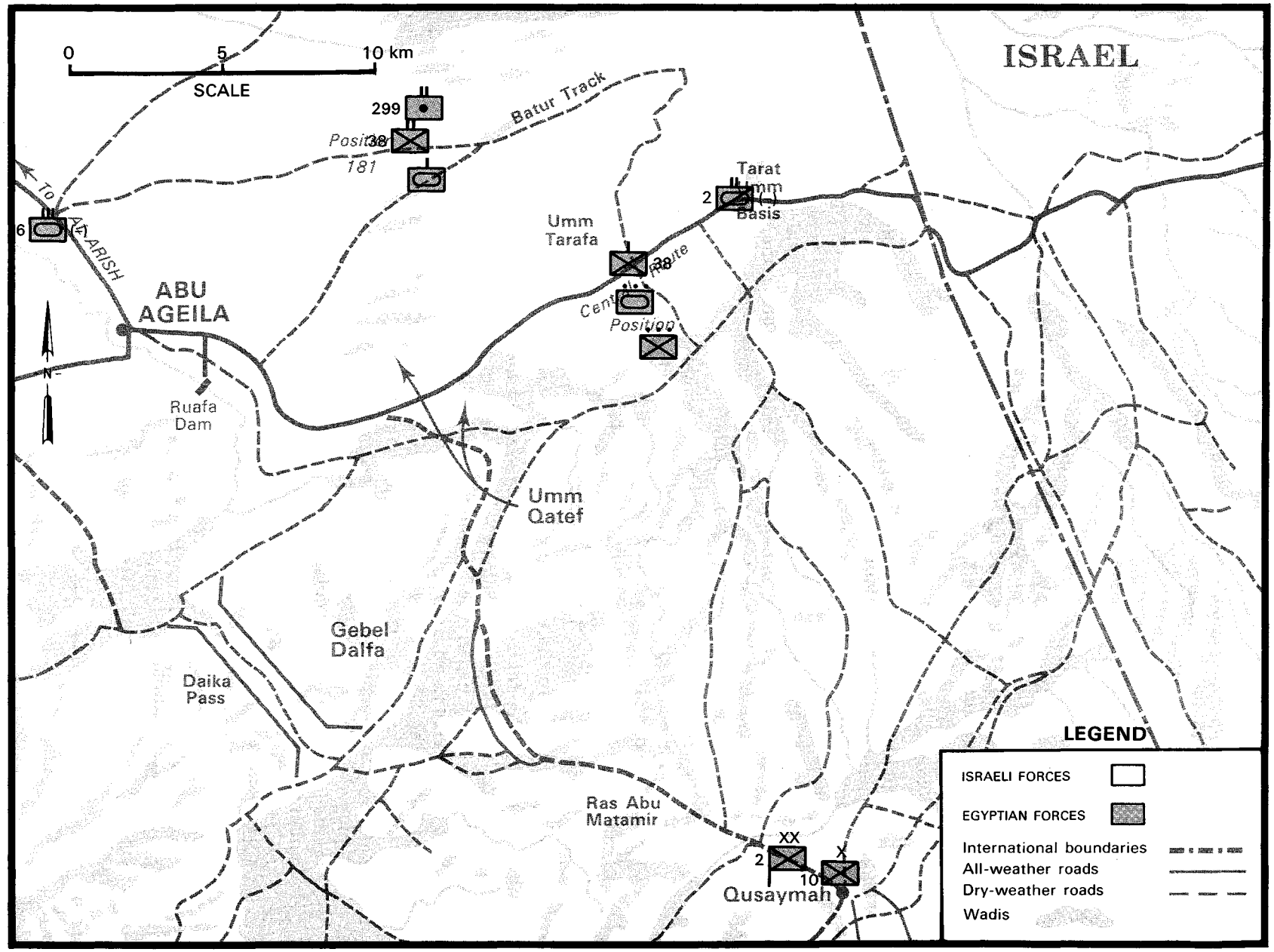
The primary mission of the reinforced Egyptian 12th Infantry Brigade at Abu Ageila was to stop an invading force—or at least inflict serious damage on it—until reinforcements arrived or the field army commander launched a major counterattack. To defend the area of Abu Ageila, the Egyptians deployed their forces in the following manner (see map 15).[39] Two infantry battalions defended the forward positions at Umm Qatef and positions along the Qusaymah Track. The 39th Infantry Battalion occupied the two lines of trenches at Umm Qatef, with the main trench running at the crest of the ridge. Guarding Qusaymah Track and the surrounding hills was the 37th Infantry Battalion. Trench systems connected positions and formed a continuous line. In front of these forward positions was a minefield 250 meters in width, along with barbed wire and antitank obstacles. Each infantry battalion received a platoon of three T-34 tanks. These tanks were dug in and would serve as antitank weapons, much like the Archers had in 1956.

Behind the second ridge west of Umm Qatef, the Egyptians scattered two battalions of artillery—the 330th Artillery Battalion, assisting the 39th Infantry Battalion, and the 334th Artillery Battalion, in support of the 37th Infantry Battalion.[40] Trenches connected the various artillery positions. At Umm Shihan, near the northern base of Gebel Dalfa, the Egyptian brigade commander stationed the bulk of the 288th Armored Battalion, whose mission was to counterattack against any breakthrough at Umm Qatef or to reinforce the forward positions if the situation demanded. Farther west, in the Ruafa Dam area, stood a second echelon composed of the 352d Infantry Battalion and the 332d and 336th Artillery Battalions. This force could serve as a second line of defense or provide elements for reinforcing the forward lines.[41] The Israelis thus faced a more formidable foe once they broke through Umm Qatef, for in 1956, the Egyptians had only one infantry company and an antitank battery at Ruafa Dam backing them up. In 1967, the Egyptian brigade commander stationed an entire infantry battalion and some twenty tanks behind Umm Qatef.

The outer ring of observation posts in 1967 also offered more of an obstacle to an attacker when compared with 1956 (see map 16). (The 10th Infantry Brigade at Qusaymah, which naturally had its own warning system, lies outside the scope of this study.) The 12th Brigade's first major observation post was located at Umm Tarafa, a small ridge located between Umm Qatef and Tarat Umm Basis. Here, the brigade commander stationed a company of in-



Map 15. Egyptian deployments at Abu Ageila



Map 16. Egyptian deployments around Abu Ageila

fantry (minus one platoon) from the 38th Infantry Battalion, a platoon of tanks from the 288th Armored Battalion, and two B-10 recoilless guns. Position 236, just south of Umm Tarafa, contained a platoon of infantry from the 37th Infantry Battalion, two B-10 recoilless guns, and two antitank weapons. A few other positions of platoon size were scattered on the way to Umm Qatef.[42]

In addition to the observation posts, the Egyptians placed forces at two important locations outside the main forward defensive perimeter. The 6th Tank Regiment, minus its 288th Armored Battalion, guarded the logistical center near the well at Awlad Ali. Its commander had two important missions: to block any Israeli attack coming from either al-Arish or Batur Track (a camel track that ran parallel to the central route) and to serve as the reserve for the brigade.

To prevent any enemy passage along Batur Track, the brigade commander positioned the bulk of the 38th Infantry Battalion, along with the 299th Artillery Battalion, at the hill area known as Position 181. A forward observation post, some ten kilometers due east from Position 181, consisted of a platoon from the 38th Infantry Battalion.[43] To support the infantry and artillery, Position 181 had either ten T-34 tanks or ten SU-100 antitank guns.[44] The manning of Position 181 proved a wise step, for the Israelis used this avenue of approach to attack Abu Ageila from the rear.

Tarat Umm Basis served as an important observation post, but unlike in 1956, the force assigned here fell within the security zone and thus was directly under the command of general headquarters in Cairo. The 2d Reconnaissance Battalion, minus one company, manned this key post, and its commander was to report any enemy troop movements both to GHQ and to the commander of the 12th Brigade.[45] This arrangement reflected a greater centralization of command in Cairo than had been the case in 1956.

Though the force at Abu Ageila was formidable indeed, consisting of sixty-six T-34 tanks, twenty-two SU-100 self-propelled antitank guns, and seventy artillery pieces, the Egyptians had created conditions that could result in a major command problem. Major General Sa'id Naguib, the commanding general of the 2d Infantry Division, had been stationed in Yemen just prior to his assignment to the Sinai at the end of May. Accustomed to fighting guerrillas in mountainous terrain, Naguib now had to adjust to a new division deployed in completely different terrain. In addition, the Egyptian commander of the 12th Infantry Brigade, directly under Naguib, lacked the flexibility of command that Boulos and Mutawalli had had in 1956. This state of affairs reflected the increased centralization in the Egyptian Army. Furthermore, the 12th Brigade commander's command post was located at Ruafa Dam—not behind the second ridge immediately west of Umm Qatef, as was the case in 1956. As a result, the Egyptian commander in 1967 would lose control of the battle.[46] When the well-trained Israeli force attacked Abu Ageila with a daring plan incorporating two tactical surprises, the confused Egyptian command suffered a brief, but fatal, paralysis.